

In the Claims

1. (currently amended) A circuit for regulating the output power of a power amplifier during a switching transient comprising:
a regulator for providing regulated power to the power amplifier;
a detector circuit coupled to the regulator and to a control signal that is generated to control the output power of the power amplifier, wherein the detector circuit detects switching transients of the power amplifier; and
a bias control circuit coupled to the regulator for applying a bias signal to the regulator to decrease the settling time of the regulator during a detected switching transient, wherein the regulator continues to provide regulated power to the power amplifier while the signal is applied.

2. (currently amended) The circuit of claim 1, further comprising a timer circuit coupled to the bias control circuit and the detector circuit for controlling when the bias signal is applied to the regulator.

Claims 3-4 (canceled)

5. (previously presented) The circuit of claim 1, wherein the detector detects when a voltage level of the control signal drops.

Claim 6 (canceled)

7. (currently amended) The circuit of claim 1, wherein the bias control circuit decreases the settling time of the regulator by applying a bias current to the regulator.

8. (currently amended) The circuit of claim 1, wherein the bias control circuit decreases the settling time of the regulator by applying a bias voltage to the regulator.

Claim 9 (canceled)

10. (currently amended) The circuit of claim 1, further comprising a switching device coupled to the detector, wherein the bias control circuit decreases the settling time of the regulator by turning on the switching device in response to a detected condition.

Claim 11 (canceled)

12. (currently amended) A circuit for regulating the output power of a power amplifier during a switching transient comprising:

a regulator for providing regulated power to the power amplifier;

a detector for detecting a condition relating to the operation of the regulator; and

control circuitry coupled to the regulator for applying a bias signal to the regulator to decrease
decreasing the settling time of the regulator in response to a detected condition, wherein
the regulator continues to provide regulated power to the power amplifier while the
condition is detected.

13. (original) The circuit of claim 12, further comprising a timer coupled to the detector and the control circuitry for controlling the duration that the control circuitry controls the output power of the regulator in response to a detected condition.

14. (original) The circuit of claim 13, further comprising delay circuitry for delaying when the control circuitry controls the output power of the regulator in response to a detected condition.

15. (original) The circuit of claim 12, wherein the output level of the regulator is controlled by a power control signal, and wherein the detector detects a condition relating to the power control signal.

16. (original) The circuit of claim 15, wherein the detector detects when the power control signal level drops.

17. (original) The circuit of claim 12, wherein the control circuitry varies the speed at which the regulator is able to respond to a detected condition.

18. (original) The circuit of claim 17, wherein the regulator is dynamically biased in response to a detected condition.

19. (currently amended) The circuit of claim 12, wherein the regulator uses a method technique to control the output power of the power amplifier, and wherein the control circuitry varies the method technique by which the regulator controls the output power of the power amplifier in response to a detected condition.

20. (original) The circuit of claim 19, further comprising switching circuitry for selectively activating two or more regulators in response to a detected condition.

Claims 21-48 (canceled)

49. (previously presented) The circuit of claim 12, wherein the regulator is a voltage regulator.

50. (previously presented) The circuit of claim 12, wherein the regulator is a current regulator.

51. (currently amended) A method of controlling a regulator for providing regulated power to a power amplifier, the method comprising:

using the regulator to regulate the power provided to the power amplifier;
detecting a condition relating to the operation of the regulator; and
in response to a detected condition, applying a bias signal to the regulator for a limited duration
to decrease the settling time of the regulator while continuing to provide regulated power
to the power amplifier.

52. (previously presented) The method of claim 51, wherein the regulator is a voltage regulator.

53. (previously presented) The method of claim 52, wherein the signal is a bias voltage.

54. (previously presented) The method of claim 51, wherein the regulator is a current regulator.

55. (previously presented) The method of claim 54, wherein the signal is a bias current.